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**Vilermo et al.**(10) **Pub. No.: US 2016/0276992 A1**(43) **Pub. Date: Sep. 22, 2016**(54) **NARROWING AUDIO FILTER TRANSITION  
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**CPC** ..... **H03G 3/00** (2013.01)(57) **ABSTRACT**

An apparatus including a first audio filter; a first transducer connected to the first audio filter; and a first sound attenuator located relative to the first transducer to attenuate sound from the first transducer. The first audio filter includes a first transition frequency band. The first sound attenuator is configured to attenuate sound generated by the first transducer from audio signals through the first audio filter in a target frequency band, where a majority of the target frequency band is in the first transition frequency band.

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